# Restoration Strategies Program Update November 2018

The South Florida Water Management District's (SFWMD) \$880 million Restoration Strategies Program includes the design and construction of a suite of regional water storage, treatment and conveyance improvement projects that will enhance water quality in America's Everglades. The program also includes a robust Science Plan consisting of research activities focused on investigating the critical factors that influence phosphorus (P) reduction and better understanding the sustainability of P removal performance at low P concentrations. The strategies also feature implementation of additional sub-regional source controls – where pollution is reduced at the source – in areas where P levels in stormwater runoff have been historically higher. Through October 2018, total program expenditures are approximately \$307 million, and all projects are scheduled to be complete by December 2025.

## **Eastern Flowpath**

#### Stormwater Treatment Area 1 West (STA-1W) Expansion #1

Construction is 89 percent complete; Substantial completion expected December 2018.

## Stormwater Treatment Area 1 West (STA-1W) Expansion #2

Design activities were initiated in September 2018; State and Federal permit application expected in July 2019.

#### **G-341** Related Conveyance Improvements

Bolles East Canal Segment 3 (~3.2 miles) construction is 89 percent complete. Segment 4 final design is underway and due in December 2018; Negotiations for JET bridge replacement are still ongoing with landowner.

#### Western Flowpath

#### STA-5/6 Internal Improvements

The Consent Order Milestones for Completion of Design, Submittal of State and Federal Permits and Initiate Construction are complete. Site utilization progress includes herbicide application, area burning and "grubbing" and initial site earthwork.

#### C-139 Flow Equalization Basin (FEB)

C-139 FEB conceptual design options are under development and will be completed by end-November.

The scope of work for final design of this feature is underway and is anticipated to be completed in December.

## **Additional Components**

#### **Sub-Regional Source Controls**

Development of sub-regional source control concepts and coordination with stakeholders is ongoing.

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# Stormwater Treatment Area (STA) Science Plan

There are currently twelve Science Plan Studies. Of these twelve studies, five have been completed, two are nearing completion and five are in-progress.

Operational Guidance for FEB and STA Regional Operation	Completed in 2017
Influence of canal Conveyance on P Concentrations	Completed in 2017
Evaluation of Sampling Methods for TP	Completed in 2017
Periphyton-Based STA Performance, Design and Operational Factors	Completed in 2018
Evaluation Rooted Floating Aquatic Vegetation in STAs	Completed in 2018
P Forms, Flux and Transformation Processes	<b>Nearing Completion</b>
STA Water and P Budget Treatment Performance Improvements	<b>Nearing Completion</b>
Vegetation Inundation Depth and Duration Sustainability	In-Progress
Soil Amendments to Control P Flux	In-Progress
Factors for Formation of Floating Tussocks in STAs	In-Progress
Effects of Faunal Species on P Cycling in STAs	In-Progress
Improving Resilience of Sub-Aquatic Vegetation in STAs	In-Progress

# **Consent Order<sup>1</sup> Milestones**

Project: Activity	Deadline	Date Completed
Eastern Flowpath		
STA-1W Expansion #1: Construction Status Report	3/1/2018	2/23/2018
STA-1W Expansion #1: Complete Construction	12/31/2018	
STA-1W Expansion #2: Complete Land Acquisition	3/31/2018	1/31/2018
STA-1W Expansion #2: Initiate Design	10/1/2018	9/25/18
L-8 Divide Structure: Complete Construction	9/30/2018	7/7/2016
S-375 Expansion: Complete Construction	12/31/2018	4/3/2017
G-341 Related Conveyance Improvements: Initiate Construction	11/30/2022	8/13/2015
G-341 Related Conveyance Improvements: Complete Construction	12/31/2024	
Central Flowpath		
A-1 FEB: Operational Monitoring and Testing Period Complete	7/29/2018	7/29/2018
Western Flowpath		
C-139 FEB: Initiate Design	10/31/2018	8/22/18
STA-5/6 Internal Improvements: Initiate Design	10/31/2019	9/10/2018
STA-5/6 Internal Improvements: Submit Permit Applications	8/30/2020	10/11/18
STA-5/6 Internal Improvements: Complete Design	10/31/2021	10/11/18
STA-5/6 Internal Improvements: Initiate Construction	10/31/2022	10/22/18

<sup>1:</sup> FDEP Consent Order 12-1148 (associated with National Pollutant Discharge Elimination System Permit No. FL0778451-001-FL7A/RA) and FDEP Consent Order 12-1149 (associated with Everglades Forever Act Permit No. 0311207)

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# **Photo of the Month**



**STA5/6 Internal Improvements:** Earth moving preparations in Cell 2A and Cell 3A.